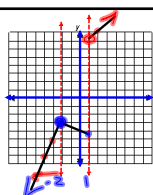
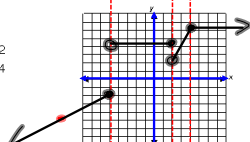


Graph the following functions

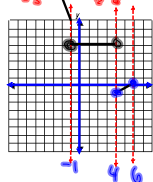
$$1. f(x) = \begin{cases} 2x+1 & \text{if } x < -2 \\ \frac{1}{2}x-4 & \text{if } -2 \leq x \leq 1 \\ x+6 & \text{if } x > 1 \end{cases}$$



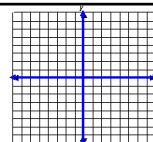
$$2. f(x) = \begin{cases} \frac{3}{5}x+1 & \text{if } x \leq -5 \\ 4 & \text{if } -5 < x \leq 2 \\ 2x-2 & \text{if } 2 < x \leq 4 \\ 6 & \text{if } x > 4 \end{cases}$$



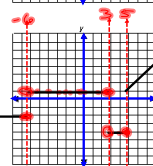
$$3. f(x) = \begin{cases} 3x+5 & \text{if } x \leq -1 \\ 5 & \text{if } -1 < x < 4 \\ \frac{1}{2}x-3 & \text{if } 4 \leq x \leq 6 \end{cases}$$



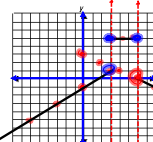
$$4. f(x) = \begin{cases} x+1 & \text{if } x < -4 \\ 2x+4 & \text{if } x \geq -4 \end{cases}$$



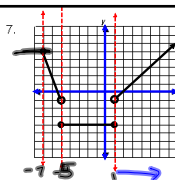
$$5. f(x) = \begin{cases} -2 & \text{if } x \leq -6 \\ 1 & \text{if } -6 < x \leq 3 \\ -4 & \text{if } 3 < x \leq 5 \\ x-4 & \text{if } x > 5 \end{cases}$$



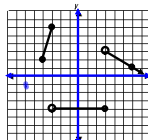
$$6. f(x) = \begin{cases} \frac{2}{3}x-1 & \text{if } x < 3 \\ 5 & \text{if } 3 \leq x \leq 6 \\ -\frac{1}{2}x+3 & \text{if } x > 6 \end{cases}$$



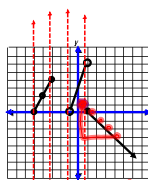
$$7. f(x) = \begin{cases} -3x-16 & \text{if } -7 \leq x < -5 \\ -4 & \text{if } -5 \leq x \leq 1 \\ x-2 & \text{if } x > 1 \end{cases}$$



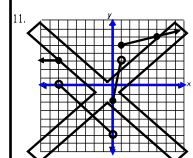
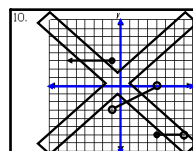
$$8. f(x) = \begin{cases} 4x+18 & \text{if } -4 \leq x \leq -3 \\ -4 & \text{if } -4 < x \leq 3 \\ -\frac{2}{3}x+5 & \text{if } x > 3 \end{cases}$$



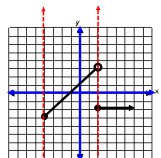
$$9. f(x) = \begin{cases} 2x+10 & \text{if } -5 \leq x < -3 \\ 3x+3 & \text{if } -1 < x < 1 \\ -x+1 & \text{if } x \geq 1 \end{cases}$$



$$\frac{1}{2} \neq$$



$$12. f(x) = \begin{cases} x+1 & \text{if } -4 \leq x < 2 \\ -2 & \text{if } x \geq 2 \end{cases}$$



Evaluate the following:

$$f(x) = \begin{cases} 2x - 1 & \text{if } x < 2 \\ -5 & \text{if } 2 \leq x \leq 5 \\ -\frac{3}{2}x - 3 & \text{if } x > 5 \end{cases}$$

13. $f(-2)$

14. $f(0)$

15. $f(10)$

16. $f(4)$

$$f(x) = \begin{cases} \frac{3}{2}x - 10 & \text{if } x \leq -5 \\ -\frac{4}{3} & \text{if } -5 < x \leq 2 \\ 2x + 3 & \text{if } 2 < x \leq 4 \end{cases}$$

17. $f(3)$

18. $f(6)$

19. $f(-6)$

20. $f(1)$

Quiz Tomorrow on Piecewise Functions